

Kharkin, M. C. and Papok, K. K.
RAPID METHOD OF DETERMINATION OF TETRA-
ETHYL LEAD IN LEADED GASOLINES. [1961] 8p.
14 refs.

Order from OTS or SLA \$1.10

61-18038

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1961,
v. 14, p. 557-561.

DESCRIPTORS: *Gasoline, Chemical analysis, *Lead
compound, Ethyl radicals, Determination.

61-18038

I. Kharkin, M. C.
II. Papok, K. K.

18177

Office of Technical Services

(Chemistry: Analytical, TT, v. 6, no. 7)

Belopol'skiy, A. P. and Shpunt, S. Ya.
THE SYSTEM $\text{FeSO}_4 - \text{H}_2\text{SO}_4 - \text{H}_2\text{O}$ AT 50-90° C.
Nov 50 [24]p. 28 refs. BISI-409; TL 734; [DSIR LLJ]
M 2070.
Order from OTS or SLA \$2.60

61-13427

Trans. of Zhurnal Prikladnoy Khimii (USSR) 1941,
v. 14, no. 6, p. 716-733.

DESCRIPTORS: *Iron compounds, *Sulfates, *Sulfuric
acid, Water, Temperature, *Phase studies *Solubility.

(Chemistry--Physical, TT, v. 6, no. 1)

61-13427

- I. Belopol'skiy, A. P.
- II. Shpunt, S. Ya.
- III. BISI-409
- IV. Trans-T/L-734
- V. DSIR LLJ M. 2070
- VI. British Iron and Steel
Industry Translation
Service

161668

Office of Technical Services

Zh Priklad Khim Vol 14, page 783-9 (1941)

Contact Surfaces of the Phases as the Main Factor of
Chlorination of Sodium Sulfate. by B. A. Kopylev and
L. P. Svyantnaya.

AEC Trans (avail. Brookhaven)

61-18001

Kreshkov, A. P.
CHLORINATION OF METHANE IN THE PRESENCE
OF STEAM (1941) ON 24 048.
Order from OTS or SLA \$1.10 61-18001

I. Kreshkov, A. P.

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1941,
v. 14, p. 803-804.

DESCRIPTORS: *Methanes, *Chlorination, Chlorides,
Steam.

In interaction of chlorine with steam, oxygen is formed
by the reverse Deacon reaction and this nascent oxygen
retards the chlorination, as indicated by Pease and
Valz; furthermore, it oxidizes methane and the prod-
ucts of its chlorination. At high temperature in the
presence of catalysts, the chlorine derivatives of
methane formed in the course of chlorination are partly
hydrolyzed. Methane interacts with steam, carbon
dioxide and other reaction products. Contrary to the
statements by Roka, chlorination of methane in the
(Chemistry-Organic, TT, v. 6, no. 7) (over)

Office of Technical Services

Dintses, A. I., Tilicheev, M. D., and Frost, A. V.
KINETICS OF CRACKING HYDROCARBONS. [1961]
5p. 14 refs.
Order from OTS or SLA \$1.10

61-18000

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1941,
v. 14, p. 805-808

DESCRIPTORS: *Hydrocarbons, Decomposition,
Reaction kinetics.

61-18000

I. Dintses, A. I.
II. Tilicheev, M. D.
III. Frost, A. V.

19476

Office of Technical Services

(Engineering--Chemical, TT, v. 6, no. 7)

Methods for Synthesis of Acetylfluoride and
Its Derivatives. I. Fluoranylides of
Carbonic Acids, by A. I. Mashentsev, 20 pp.

RUSSIAN, no per, Zhur Prikl Khim, Vol XIV,
No 6, 1941, pp 816-826.

Sci Tr Center
RT-2234

Scientific - Chemistry
CTS 70/Jul 55

25, 227

Margolis, L. D.
OXIDATION OF TOLUENE TO BENZALDEHYDE.
[1961] pp. 1, refs.
Order from DTIC as SLA \$1.10

61-18033

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1941,
v. 14, p. 827-833.

*DESCRIPTORS: *Toluenes, Oxidation; *Benzaldehydes,
Electrolysis; *Electrochemistry.

Oxidation of toluene to benzaldehyde can be carried out
with oxidizing agents capable of electrolytic regenera-
tion. For this purpose a solution of manganese sulfate
in sulfuric acid of specific gravity 1.500 is suitable.
The oxidizing agent may be regenerated in an apparatus
with lead electrodes without a diaphragm. This may
easily be carried out under plant conditions. The opti-
mal conditions of oxidation of toluene and of regenera-
tion of the oxidizing agent are: (a) specific gravity of
sulfuric acid used for the bath, 1.500; (b) temperature
(Chemistry -Organic, TT, v. 6, no. 7) (over)

61-18033

L. Margolis, L. D.

451.75

Office of Technical Services

61-18033

61-16939

I. Zabavin, V. I.

Zabavin, V. I.
SUBSTANCES ISOLATED FROM PRIMARY TARS
WITH PETROLEUM ETHER, II. [1961] 8p. 6 refs.
Order from OTS or SLA \$1.10 61-16939

Trans. of Zhurnal Fiziko-Khimii (USSR) 1941,
v. 14, p. 849-855.

DESCRIPTORS: *Petroleum, *Tars, Decomposition,
Separation, Coal, Chemical reactions, Solubility,
Solvents.

1961

A study of the substances insoluble in petroleum ether
and included in the composition of primary tars of
Cheremkhovo coal, Aleksandriya brown coal and
Kashpit shale revealed that these primary tar com-
ponents of the two coals constitute a mixture of sub-
stances of humic and resinous character. The humic
portion of Cheremkhovo coal tar is neutral in charac-
ter, while that from the Aleksandriya coal possesses
(Engineering--Chemical, T.F., v. 6, no. 12) (over)

Office of Technical Services

Equilibrium Diagram for the System CaO-SiO_2 , by
K. K. Kolobova, 17 pp.

RUSSIAN, per, Zhur Prih Khim, Vol XIV, 1941, pp
928-938.

SLA R-2244

Sci

Aug 58

72,186

62-20273

Klochko, M. A. and Medvedeva, Z. C.
USE OF PALLADIUM IN ELECTROLYTIC COATINGS.
23 Jan 46, 18p. (figs. tables refs. omitted).
Order from OTS or SLA \$1.60 62-20273

I. Klochko, M. A.
II. Medvedeva, Z. C.

Trans. of [Zhurnal Prikladnoi Khimii] (USSR) 1942,
v. 15, no. 1/2, p. 25-46.

An abstract trans. is available from OTS or SLA \$1.10
in 61-20333 [1961] 4p.

DESCRIPTORS: *Palladium, *Electroplating, Coatings,
*Finishes, Palladium compounds.

Studies were made of the conditions for the securing of
lustrous and dense Pd deposits from palladous chloride
and chloro palladates of sodium, potassium and ammo-
nium, as well as from the solutions of the complex Pd
compounds containing the groups: NH_3 , PO_4 , NO_2 and
Cn.

(Metallurgy, TT, v. 9, no. 9)

Office of Technical Services

JOURNAL OF APPLIED CHEMISTRY, 1942, VOL. 15,
NO. 3: [TABLE OF CONTENTS] AND SELECTED
ABSTRACTS. 1961] 8p. 18 refs.

Order from DTS or SLA \$1.10

61-20334

Abstract trans. of Zhurnal Prikladnoi Khimii (USSR)
1942, v. 15, no. 3: p. 101-104, *128-150, 164-171,
175-181.

*Complete translations are available separately.

DESCRIPTORS: *Chemistry, *Bromine, Sources,
Catalysis, Dehydrogenation, *Butenes, Butadienes,
Reduction, Decomposition, *Cyclohexanes, High tem-
perature research, Catalysts, Metals, *Anthracenes,
Sulfonic acids, Solubility, Salts, *Fuels, Carboniza-
tion, Fluidized solids.

Contents:

Some new sources of bromine, by I. G. Druzhnin
(Chemistry, IT v. 7, no. 1) (over)

61-20334

I. Title: Solubility ...

II. Title: Carbon ...

Office of Technical Services

Balandin, A. A., Zelinaki, N. D. and others.
CATALYTIC DEHYDROGENATION OF BUTENE TO
BUTADIENE UNDER REDUCED PRESSURE. [1961]
11p. 15 refs.
Order from OTS or SLA \$1.60 61-16636

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1942,
v. 15, p. 128-138.

DESCRIPTORS: *Butadienes, Dehydrogenation,
*Butenes, Chromium catalysts.

Research on dehydrogenation of 1-butene to 1,3-butadiene was continued by employing a pressure of 180 mm and two chromium catalysts. The effect of the contact period and the temperature were systematically investigated. Occurrence of two consecutive reactions was established consisting in formation and decomposition of butadiene. The highest yield of butadiene was obtained at 592° and a rate of flow of 2,000 liters per liter catalyst per hour. This yield amounted to 29% on the (Chemistry-Organic, IT, v. 6, no. 6) (over)

61-16636

I. Balandin, A. A.
II. Zelinaki, N. D.

176561

Office of Technical Services

Balandin, A. A. and Kotelkov, N. Z.
DEHYDROGENATION AND DECOMPOSITION OF
CYCLOHEXANE AT HIGH TEMPERATURES OVER
METALLIC CATALYSTS. [1961] 14p. 19 refs.
Order from OTS or SLA \$1.60 61-16919

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1942,
v. 15, p. 139-150.

DESCRIPTORS: *Cyclohexanes, Dehydrogenation,
Decomposition, Catalysts.

Catalytic dehydrogenation and decomposition of cyclo-
hexane was investigated at 300-600° over electrically
heated coils of nichrome, platinized nichrome, pal-
ladized nichrome, iron and chromium-plated iron, using
a specially constructed apparatus distinguished by a
number of advantages over the conventional catalytic
equipment. Kinetic data for these reactions were ob-
tained and a hypothesis of dendritic deposition of carbon,
based on the multiple theory of catalysis, is suggested
as an explanation of the data obtained. (Author)

61-16919

I. Balandin, A. A.
II. Kotelkov, N. Z.

1971 2

Office of Technical Services
(Chemistry--Organic,
TT, v. 6, no. 7)

Shostakovskii, M. F. and Bogdanov, I. P.
POLYMERIZATION OF SIMPLE VINYL ETHERS. I.
VINYL BUTYL ETHER. [1963] [21p] (figs omitted)

10 refs

Order from OTS or SLA \$2.60

63-20173

Trans. of [Zhurnal Prikladnoi Khimii] (USSR) 1942,
v. 15 [no. 4] p. 249-259.

Abstract trans. is available from OTS or SLA \$1.60
in 61-20335 [1961] 1-p.

DESCRIPTORS: *Vinyl radicals, *Butyl radicals,
*Ethers, *Polymerization, Catalysts, *Iron catalysts,
Chlorides, Purification, Density, Refractive index,
Viscosity.

(Chemistry--Organic, TT, v. 10, no. 12)

63-20173

- I. Title: Vinyl Butyl ethers
- I. Shostakovskii, M. F.
- II. Bogdanov, I. P.
- III. Title: Vinyl . . .

Office of Technical Services

Synthesis and Properties of Aryl Vinyl Ethers, by
M. P. Shostakovskiy, M. S. Burmistrova, 11 pp.

RUSSIAN, no per, Zhur Prik Khim, Vol XV, No 4,
1942, pp 260-266.

Sci Tr Center Ref 3601

Scientific - Chemistry

36,136

Jun 56 CTS

Decomposition of Phosphorites by a Mixture of
Sulfur Dioxide and Nitrogen Oxides, by G. A. Yakovkin,
15 pp.

RUSSIAN. per, Zhur Prii Khim. Vol XV, 1942, pp
pp 275-289.

SLA R-2884

Sri

Jul. 59

92, 644

On Catalysts for the Reaction of Formation
of Carbon Disulphide from Elements, by
L. Ya. Markovskiy, N. Khoroshkova,
UNCLASSIFIED

RUSSIAN, per, Zhur Prik Khim, Vol XV, No 5,
1942, pp 290-301.

Insdoc

~~SECRET~~

T. 654

20,548

Scientific - Chemistry Jan 55 CRS
Indian National Sci Doc Center, Natl Physical Lab
of India, Hillside Rd., New Delhi-12, India

Kuperman, G. M.
RECLAIMING SULFURIC ACID SLUDGES FORMED
IN OIL REFINING. [1961] 8p. 25 refs.
Order from OTS or SLA \$1.10 61-16648

Condensed Trans. of Zhurnal Prikladnoi Khimii (USSR)
1942, v. 25, p. 319-320.

DESCRIPTORS: *Sulfuric acid, Separation,
*Petroleum, Oil, Processing, Recovery, Electrolysis.

It was established that sulfuric acid can be reclaimed
from acid sludge or black acid by electrolytic means.
The concentration of the obtained acid can be raised to
92% by evaporation before or after the electrolytic
treatment. The color of the finished acid is also quite
satisfactory, and when determined with a Duboscq
apparatus it ranges from 5.3 to 29.3 mm. Technical
sulfuric acid, the color of which was determined at the
plant to be 48.1 mm, showed a very small content of
(Engineering-Chemical, TT. v. 6, no. 7) (over)

61-16648

I. Kuperman, G. M.

18173

Office of Technical Services

Berkengelm, A. M. and Polunina, E. P.
EMULSIFYING LUBRICATING OILS WITH PRODUCTS
OF SULFONATION OF SHALE TAR. [1961] 6p.

4 refs.

Order from OTS or SLA \$1.10

61-18178

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1943,
v. 16, p. 345-350.

DESCRIPTORS: *Lubrication, *Oils, Colloids,
Sulfonates

Sodium salts of sulfonic acids prepared from shale tar fractions are a good emulsifier of lubricating oils. In comparison with naphthalenesulfonic acids a considerably smaller amount of this agent is required. Preparation of concentrated emulsions can be effected at room temperature, which simplifies the manufacturing process. No alcohol is required for the preparation of an emulsion. The corrosion of steel is completely prevented by adding to the aqueous emulsion up to 0.55% sodium carbonate. (Author)

61-18178

I. Berkengelm, A. M.
II. Polunina, E. P.

Office of Technical Services
(Materials--Lubricants,
TT, v. 6, no. 7)

The Synthetic Rubber Industry During the Twenty-
Five Years of Soviet Power, by N. J. Smirnov,

RUSSIAN, 1957, Nauka Press, Moscow, Vol. IV, No. 6, 1957,
pp. 573-576.

DATE REC'D 4.10.60

USSR

171. 7. 61

Doc

Oct 61

Vapour Pressure of Sulphates of Antimony, Lead,
Cadmium, and Zinc, by B. K. Veselovskii.

RUSSIAN, per, Zhurn. Prikl. Khim., Vol 15, No 6, 1942,
422-435.

~~SECRET~~

Sci Museum Lib No 50/3539 - London

Sulphate Nitrophoska I. II. Polytherm of the
Reversible Reciprocal System of Sulphates and
Nitrates of Potassium and Ammonium, by I. N.
Nikonova and A. G. Bergman, 11 pp.

RUSSIAN, per, Zhur Prik Khim, Vol XV, 1942, pp
437-446.

SLA R-2286

Sci

Aug 58

72,193

Kinetics of Reduction of Cu^{++} To Cu^{+} by Carbon
Monoxide, in Ammoniacal Solutions, by E. I.
Dontsova, UNCLASSIFIED

RUSSIAN, per, Zhur Prikl Khim, Vol. 15, 1942,
pp 447-452.

Assoc Tech Ser, RJ-80
Price: \$9.50 (\$1.20)

Scientific - Chemistry

18,095
R-2267
SLA R-2094

Succinic acid and its Ethyl Esters, by I. Kh.
Feldman, E. S. Troyanova, 8 pp.

RUSSIAN, per, Zhurnal Prikladnoi Khimii, Vol
XVI, No 1, 2, 1943, pp 15-19.

Sci Tr Center RT 36 03

36, 152

Chemistry

Jun 56 CTS

Preparation of Hydrophobic Cellulose, Part I., by D. N.
Kursanov, V. N. Setkina, 2 pp.

RUSSIAN, per. Zhur Prikl Khim, Vol XVI, 1943, pp 36-45.

CIA/FDD/K-1325

Scientific - Chemistry

REF DEX

14,087

Kazakov, E. I., Edel'shtein, N. G., and Chegis, A. F.
CHEMICO-TECHNOLOGICAL INVESTIGATION OF BITUMINOUS SHALES OF THE MANTUROV FIELD
[1961] 5p. 2 refs.

Order from OTS or SLA \$1.10

61-16957

Condensed trans. of Zhurnal Prikladnoi Khimii (USSR)
1943, v. 16, p. 72-77.

DESCRIPTORS: Fuels, *Shales, *Bitumens, Gasoline,
Sulfur, Chemical analysis, USSR.

Three samples of shale from the Usol'e section of the Manturov deposit (Gor'ki and Ivanovo regions on the Volga) have been investigated. The first sample contains 44% ash and has a calorific value of over 4,000 cal. The yield and composition of primary tar are advantageous for its use as fuel and make it a suitable material for preparation of motor fuel. Shales from (Materials--Fuels, TT, v. 6, no. 10) (over)

61-16957

I. Kazakov, E. I.
II. Edel'shtein, N. G.
III. Chegis, A. F.

Office of Technical Services

Simonova, L. K.
DETERMINATION OF THERMAL CONSTANTS OF
ACTIVATED CARBON AND SILICA GEL. [1961] 5p.
7 refs.

Order from OTS or SLA \$1.10

61-16958

Condensed trans. of Zhurnal Prikladnoi Khimii (USSR)
1943, v. 16, p. 87-94.

DESCRIPTORS: *Gels, *Silicon compounds,
*Activated carbon, Colloids, Conductivity, Tempera-
ture, *Heat transfer, Calorimeters.

The heat capacities, thermal conductivities and tem-
perature conductivities of three samples of activated
fruit pit carbon and of one sample of silica gel were
determined at 0, 20 and 70°. The temperature con-
ductivity of powdered samples increases over that of
granulated samples at the average by 11.1%; the corre-
sponding increase in the thermal conductivity is 35.9%.
(Physics--Thermodynamics, TT, v. 6, no. 9) (over)

61-16958

I. Simonova, L. K.

185414

Office of Technical Services

Syntheses of Vitamin B₁₂ by A. I. Gerasim, 21 pp.

RUSSIAN, per Zhur Prikl. Khim, Vol XVI, ¹⁶⁸⁴ 1943,
pp 105-117.

4EC-EP-47-1052

Sci-Chem
Jan 64

ALL (down) Ref. 5828.4 1963 (10, 11)

248,347

Pesin, L. M., Belyanina, E. T., and
Pavlovskaya, V. A.

HYDRATION OF CAMPHENE TO ISOBORNEOL.

1961 5p. 11 refs.

Order from CTS or SLA \$1.10

61-16985

Condensed trans. of Zhurnal Prikladnoi Khimii (USSR)
1943, v. 16, p. 129-133.

DESCRIPTORS: *Sulfonic acids, *Camphene, Hy-
drates, *Camphanes.

Hydration of camphene in acid medium was investi-
gated in the presence of refined Petrov's kontakt
[mixture of sulfonic acids]. An 80% yield of a crystal-
line product was obtained containing over 60% iso-
borneol and about 40% camphene. (Author)

(Chemistry--Organic, TT, v. 8, no. 10)

61-16985

I. Pesin, L. M.
II. Belyanina, E. T.
III. Pavlovskaya, V. A.

Office of Technical Services

Mamedli, M. G.

SYNTHETIC OILS FROM CRACKED DISTILLATES.

[1961] 8p. 11 refs.

Order from OIS or SLA \$1.10

61-16984

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1943, v. 16, p. 143-150.

DESCRIPTORS: *Lubrication, *Oils, *Waxes, Decomposition.

The best lubricating oils, satisfying the requirements for aviation oils with respect to viscosity index, oxidation stability, low pour point and low specific gravity, as well as high flash point, are obtained from products of cracking paraffin wax. Polymerization of cracked distillates to synthetic lubricating oils in the presence of aluminum chloride takes place not only at low temperatures 125-130°. The qualitative and quantitative characteristics are identical in both cases. At the (Chemistry--Organic, 17, v. 6, no. 8) (over)

61-16984

I. Mamedli, M. G.

305120

Office of Technical Services

Oxidation of Nicotine to ~~Nicotine~~ Nicotinic Acid,
by E. A. Vagyunina et al, UNCLASSIFIED

RUSSIAN, par, Zhur Prik Khim, Vol XVI, No 5-6,
1943, pp 206-210.

Asso: Tech Ser
6872R

Price: \$10.00 (\$1.25)

Scientific - Chemistry

18,098

Sumarokov, V. P., Rylkin, S. S., and
Bogoyavlenskaya, V. N.
PREPARATION OF PYROCATECHOL BY DECOMPO-
SITION OF PHENOL ETHERS OF WOOD CREOSOTE
UNDER ATMOSPHERIC PRESSURE, I. [1961] 8p.
9 refs.

Order from OTS or SLA \$1.10

61-18169

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1943,
v. 16, p. 219-226.

DESCRIPTORS: *Pyrocatechol, Ethers, *Wood, Creosote
Synthesis.

Experiments of preparation of pyrocatechol from two
samples of creosote with the aid of aniline hydrochlor-
ide are reported, in which it was established that: (1)
practically complete decomposition of the phenol ethers
of creosote may be achieved by this method; (2) the re-
action requires more time than the action of hydro-
(Chemistry--Organic. "T", v. 6, no. 6) (over)

61-18169

I. Sumarokov, V. P.
II. Rylkin, S. S.
III. Bogoyavlenskaya, V. N.

176601

Office of Technical Services

Ferrous Trisulfide, by S. V. Lipin, 22 pp.

RUSSIAN, per, Zhur Prii Khim, # Vol XVI, No 7-8,
1943, pp 258-259.

CIA/FDD X-2794

Sci - Chem
Mar 58

60, 686

61-16911

Esafov, V. I.

QUALITATIVE ANALYSIS OF DIENE HYDROCARBONS. I. Esafov, V. I.

WITH CONJUGATED DOUBLE BONDS, III. [1961] 10p.

8 refs.

Order from OTS or SLA \$1.10

61-16911

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1943,
v. 16, p. 283-294.DESCRIPTORS: Iodine, *Hydrocarbons, *Molecular
structure, Chemical reactions, *Ethylenes,
Halogenation.

Bromination in carbon tetrachloride was shown by
precise data to be a specific reaction only for those
diene hydrocarbons, the molecules of which possess
one, or still better, two side chains attached to the car-
bon atoms of the conjugated system. In the last men-
tioned case the reaction is accompanied by evolution of
considerable amounts of hydrogen bromide and con-
(Chemistry--Physical, TT, v. 6, no. 8) (over)

135124

Office of Technical Services

ZHURNAL Prikl Khim

Vol 16, No 7-8 (1943)

pp 325-327

Department of Research Programmes & Planning
Admiralty
The Use of Cupferron in Qualitative Chemical
Analysis, by P. M. Isakov

ACSIL Trans No. 387 (British)

File No. U-625/49 in

FOD Lib

61-14012

Kurssanov, D. N. and Solodkov, P. A.
NEW METHOD OF OBTAINING COLORED DERIVA-
TIVES OF CELLULOSE. [1943] 9p. (conclusions
illus. omitted)

Order from OTS or SLA \$1.10 61-14012
• **ATS** #8.25 (5pp) **ATS-74872R**
Trans. of Zhurnal Prikladnoi Khimii (USSR) 1943, v. 16,
no. 11/12, p. 351-355

DESCRIPTORS: Cellulose chemistry, *Cotton cellulose,
*Synthetic fibers. Test. Color. *Ammonium radicals,
*Exchange reactions, *Pigments

I. Kurssanov, D. N. .
II. Solodkov, P. A.

184013

Office of Technical Services

61-16894

Andreev, E. A., Avramenko, V. I. and others.
PREPARATION OF ALDEHYDES BY OXIDATION OF
BY-PRODUCTS OF SYNTHETIC RUBBER MANU-
FACTURE. I. COOL FLAME OXIDATION OF SK
MOTOR FUEL. [1961] 9p. 7 refs.
Order from OTS or SLA \$1.10

61-16894

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1943, v. 16,
p. 356-364.

DESCRIPTORS: *Synthetic rubber, Oxidation, *Alde-
hydes, Hydrocarbons, Flames, Fuels, Fungicides.

Optimal temperature conditions were established for
operation of a semi-plant scale unit for low temperature
oxidation of hydrocarbons obtained as by-products of
the production of 1, 3-butadiene from ethyl alcohol (SK
Motor Fuel). In the vaporizer and air preheater, a tem-
perature of 200° is to be maintained, and in the reac-
tor a temperature of from 400 to 420°. Up to 96% of

(Chemistry--Physical, TT, v. 6, no. 8) (over)

- I. Andreev, E. A.
- II. Avramenko, V. I.
- III. Title: Cool...

135119

Office of Technical Services

Stability and Volatility of Tin Oxides, by V. K.
Veselovskiy, 29 pp.

RUSSIAN, per, Zhur Prikl Khim, Vol XVI, 1943,
pp 397-416. 9493512

AEC UCEL Tr-821(L)

Sci - Chem
Jul 62

204, 688

Structure and Germicidal Properties of Organic Compounds. Communication I. Derivatives of Hydroxydiphenyl, by H. M. Mel'nikov, N. S. Rokitskaya, Z. E. Bekker, 12 pp.

RUSSIAN, no per, Zhur Prik Khim, Vol XVI, No 9-10, 1943, pp 426-432.

36,111
Sci Tr Center RT-3602

Scientific - Chemistry

Jan 56/dex

Resistance of Gas-Chromized Carbon Steel to Corrosion by Sulphur-containing Media, by V. I. Arkharov, and other.

RUSSIAN, par, Zhur Prik Khim, Vol XVI, Nos 11, 12, 1943.

Brutcher Tr 1725

Scientific - Chemistry
~~XXXXXXXXXX~~

\$4.95

12,848

Combined Solubility of Li_2CO_3 with Na or
K Carbonate in Water, by G. G. Urazov and
Z. I. Lifatova, 7 pp.

RUSSIAN, per, Zhur Prik Khim, Vol XVII,
1944, pp 16-21.

SLA R-2434

Sci

Aug 58

72,143

Ushakov, S. N. and Matuzov, N. A.
COPOLYMERIZATION OF CHLOROSTYRENES WITH
STYRENE AND WITH METHYL METHACRYLATE.
[1961] 6p. 3 refs.

Order from OTS or SLA \$1.10

61-16904

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1944,
v. 17 [no. 1/2] p. 52-59.

DESCRIPTORS: *Copolymerization, *Styrenes,
Chlorides, *Acrylic resins, Chemical reactions.

The velocity of copolymerization of chlorostyrenes
with styrene and with methyl methacrylate depends
upon the proportions of the reactants. The higher is
the content of the monomer in the reaction mixture,
which is characterized by a higher velocity of poly-
merization, the greater is the velocity of copolymeri-
zation. In copolymerization of p-chlorostyrene with
styrene the reaction velocity increases in proportion to
(Chemistry--Organic, IT, v. 6, no. 8) (over)

61-16904

I. Ushakov, S. N.
II. Matuzov, N. A.

135122

Office of Technical Services

Lel'chuk, S. L., Balandin, A. A. and others.
DEHYDROGENATION OF ETHYL ALCOHOL OVER
MIXED CATALYSTS. [1961] Sp. 8 refs.
Order from OTS or SLA \$1.10 61-16907

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1944,
v. 17 [no. 1/2] p. 60-64.

DESCRIPTORS: Dehydrogenation, *Catalysts,
*Ethanol, Esters, Esterification, Chemical reactions,
Ethyl radicals, Acetates, Acetic acids, Titanium
compounds, Oxides.

Dehydrogenation of ethanol was studied, leading to for-
mation of substantial amounts of acetic acid and ethyl
acetate. Three-component catalysts were investigated
for this reaction, consisting of copper and alumina pro-
moted with oxides of cadmium or titanium. The cata-
lyst promoted with cadmium oxide has no advantages
over the two-component catalyst, consisting of copper
(Chemistry- Organic, TT, v. 6, no. 8) (over)

61-16907

I. Lel'chuk, S. L.
II. Balandin, A. A.

186126

Office of Technical Services

Microcolorimetric Determination of Vanadium in
Rocks, Minerals, and Gases by Means of Benzidine.
by I. P. Alimarin, 12 pp.

RUSSIAN, per. Zhur Prik Khim, Vol XVII, 1944,
pp 83-93.

SLA R-3092

Sci

Jul 59

91,393

Yakubchik, A. I., Vasil'ev, A. A. and others.
CHEMICAL CHARACTERISTICS OF BUTADIENE
RUBBERS BASED ON DETERMINATION OF FORMIC
ACID AND FORMALDEHYDE IN THE PRODUCTS OF
DECOMPOSITION OF THEIR OZONIDES. [1961] 6p.
33 refs.

Order from OTS or SLA \$1.10

61-16908

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1944, v. 17
[no. 1/2] p. 107-113.

DESCRIPTORS: *Rubber, Decomposition, Ozonides,
Butadienes, Formaldehyde, *Synthetic rubber, Formic
acids.

A rapid method of classification of butadiene polymers
and their copolymers, for instance with styrene, was
developed, based on correlation of the properties of the
rubber with the number of vinyl linkages in the rubber
molecule indicated by ozonization. Data for 14 types of
(Materials--Rubber, TT, v. 6, no. 2)

61-16908

I. Yakubchik, A. I.
II. Vasil'ev, A. A.

61-16908

Office of Technical Services

Ushakov, S. N., Lavrent'eva, E. M. and others.
POLYVINYL ACETAL COATINGS FOR MAKING
CONCRETE IMPERMEABLE TO GASOLINE. [1962]
9p. 17 refs.

Order from OTS or SLA \$1.10

62-14612

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1944,
v. 17 [no. 1/2] p. 125-136.

DESCRIPTORS: *Gasoline, Permeability, *Concrete,
Coatings, *Acetals, Polymers, *Vinyl radicals,
*Plastic coatings.

The mechanical strength, swelling, permeability to
water and gasoline were determined of films of poly-
vinyl acetate and polyvinyl acetals, free and in the form
of coatings on concrete. The dependence of the proper-
ties of the coatings upon the extent of polymerization
and the nature of the substituent in the acetal of poly-
vinyl alcohol, as well as upon the extent of plastifica-
(Chemistry-Physical, T¹, v. 9, no. 1) (over)

62-14612

I. Ushakov, S. N.
II. Lavrent'eva, E. M.

Office of Technical Services

Suvorovskaya, N. A.
DETERMINATION OF IRON IN ALUMINATE
SOLUTIONS BY A POLAROGRAPHIC METHOD, tr. by
Ingeborg V. Baker and George N. Kaschkoft. 1 Jan 63.
cp. 6 refs. [AMC] (Redstone) Trans-no. 1-63.
Order from GTS or SLA \$1.10 63-15134

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1944,
v. 17, no. 3, p. 156-158.

DESCRIPTORS: *Aluminates, Solutions, *Iron,
*Polarographic analysis, Iron compounds, Sulfides,
Complex compounds.

This work demonstrates the practicability of using the
polarographic method of analysis for determination of
iron in aluminate solutions. The iron is precipitated in
the form of sulfide, dissolved in hydrochloric acid, and
reduced by sulfur dioxide during boiling of the solution
(Chemistry--Analytical, IT, v. 10, no. 2) (over)

63-15134

- I. Suvorovskaya, N. A.
- II. AMC(Redstone) Trans-1-63
- III. Army Missile Command,
Redstone Arsenal, Ala.

Office of Technical Services

Determination of Phosphorus in Limestones
by Titration of Excess 8-Hydroxyquinoline,
by P. O. Rudnikov and S. S. Zhukovskaya,
7 pp. ✓

RUSSIAN, per, Zhur Prikl Khim, Vol XVII, 1944,
pp 165-169.

SLA R-2541.

Sci

Aug 58

72,803

197
Action of Na_2SO_4 on the Decomposition of
Spodumene of Fusion with K_2SO_4 , by G. P.
Aleksandrov, 6 pp.

RUSSIAN, per, Zhur Prik Khim, Vol XVII,
1944, pp 183-187.

SIA R-2435.

Sci

Aug 58

72,118

The Reduction of Germanium Compounds at the Dropping
Mercury Electrode., by I. P. Alimarin, D. N. Ivanov-gmin,
pp. 87
RUSSIAN, 1936, Zhurnal Prikl Khim, Vol XVII, p. 204, 1936

Sci Mag, Lib 53/2668

3

10,482

Sci - Chemistry
C/S/DEA

Pakshver, A. and Zlatoustovskaya, A.
 OXIDATION OF AMMONIA IN SOLUTIONS OF COM-
 PLEX CUPRAMMONIUM COMPOUNDS. [1961] 9p.
 7 refs. T/L 724 [DSR LLJ] M 2066.
 Order from LC or SLA in \$1.80, plus \$1.80 61-13423

Trans. of Zhurnal Prikladnoy Khimii (USSR) 1944,
 v. 17, p. 259-265

Sol. from Lib. 60/2166

(Chemistry--Inorganic, IT, v. 5, no. 12)

61-13423

1. Ammonia--Oxidation
2. Complex compounds--
Chemical reactions
3. Copper compounds--
Chemical reactions
4. Cellulose--Oxidation
- I. Pakshver, A.
- II. Zlatoustovskaya, A.
- III. Trans-T/L-724
- IV. DSR LLJ M.2066

16659.

Office of Technical Services

Pakshver, A. and Zlatoustovskaya, A.
THE OXIDATION OF AMMONIA IN SOLUTIONS OF
COMPLEX CUPRAMMONIUM COMPOUNDS. [1964] 12p
8refs
Order from CTS, SLA, or ETC \$1.60 TT-64-10771

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1944, v. 17,
no. 4/5, p. 259-265.
Another trans. is available from LC or SLA mi\$1.80,
ph\$1.80 as TT-61-13423 [1961] [9p].

(Chemistry-Inorganic, TT, v. 11, no. 12)

TT-64-10771

I. Pakshver, A.
II. Zlatoustovskaya, A.

Office of Technical Services

Rapid Method for the Analysis of NH_4NO_2 in
Hydrated Form, by V. G. Vasil'ev, 10 pp.

RUSSIAN, per, Zhur Prik Khim, Vol XVII, 1944,
pp 266-273.

SLA R-2436

Sci.

Aug 58

72,116

62-28788

Amelin, A. G.
SULPHURIC ANHYDRIDE ABSORPTION WITH WATER
SULPHURIC ACID SOLUTIONS (Absorbtsiya Sernogo
Angidrida Vodnymi Rastvorami Sernoi Kisloty). 17p.
(foreign text included) 7 refs. DTC-1.
Order from OTS, ETC or DTC \$1.30 62-28788

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1944,
v. 17 [no. 6] p. 319-325.

DESCRIPTORS: *Sulfuric acid, *Anhydrides,
*Absorption, Solutions, Experimental data.

(Chemistry--Physical, TT, v. 10, no. 2)

- I. Amelin, A. G.
- II. DTC-1
- III. Danish Translations
Centre, Roskilde

Office of Technical Services

Complex Treatment of Apatite^y with Hydro-
chloric Acid, by S. I. Volfkovich and A.
Loginova, 17 pp.

RUSSIAN, per, Zhur Prik Khim, Vol XVII, 1944,
pp 381-393.

SLA R-2149
072 63-14640

Sci

Aug 58

72, 154

Improvement in the Manufacture of Sodium
Fluosilicate 11. Solubility of Sodium
Fluosilicate, by K. E. Kleiner, 10 pp.

RUSSIAN, per, Zhur Prik Khim, Vol XVII,
1944, pp 409-416.

SLA R-2152 also 63-14616

Sci

Aug 58

72,428

Polymerization of Chlorostyrenes, ^{com I} by S. N. Ushakov, ~~EX~~
P. A. Matuzov, 16 pp UNCLASSIFIED

RUSSIAN, ~~per~~, Zhur Prikl Khim, Vol. XVII, No. ~~9-10~~,
1944, pp ~~588-595~~ 7/8 F I
435-444

Sci Tr Center
HE-1017

Scientific - Chemistry

15,348

61-18218

I. Drinberg, A. Ya.
II. Krechkov, P. P.Drinberg, A. Ya. and Krechkov, P. P.
RESINS AND VARNISHES FROM SUBSTITUTED PHE-
NOLS OBTAINABLE FROM PEAT TAR. [1961] 5p.
15 refs.

Order from OTS or SLA \$1.10

61-18218

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1944, v. 17,
p. 458-462.DESCRIPTORS: *Resins, Varnishes, Phenols, Peat,
Substitution reactions.

The possibility was demonstrated of preparing a resin
and a varnish of quality not lower than that prepared
from pure alkyl phenols, using widely differing alky-
lated phenols from peat. Addition of about 30% of a
mixture of cresols to tertiary butylphenol lowers the
quality of the varnish obtained. (Author)

(Materials--Finishes, TT, v. 6, no. 8)

61-18218

Office of Technical Services

Kmelevskii, V. I. and Postovskii, I. Ya.
METHOD OF INVESTIGATION AND ANALYSIS OF
COMPOUNDS OF CRUDE ANTHRACENE AND
OTHER HIGH-BOILING FRACTIONS OF COAL TAR.
Rept. 10 on Polycyclic Hydrocarbons. [1961] 13p.
(1 fig. omitted) 24 refs.
Order from OTS or SLA \$1.60

61-20929

Trans. of [Zhurnal Prikladnoi Khimii] (USSR) 1944,
v. 17, p. 463-470.

DESCRIPTORS: *Hydrocarbons, *Anthracenes, *Coal
tar, Boiling, Fractionation.

(Chemistry--Organic, TT, v. 7, no. 9)

61-20929

I. Kmelevskii, V. I.
II. Postovskii, I. Ya.
III. Title: Polycyclic...

Office of Technical Services

62-14157

JOURNAL OF APPLIED CHEMISTRY, 1944, VOL. 17,
NO. 9/10: [TABLE OF CONTENTS AND SELECTED
ABSTRACTS]. [1961] 6p. 11 refs.

Order from DTIC or SLA \$1.10

62-14157

Abstract trans. of Zhurnal Prikladnoi Khimii (USSR)
1944, v. 17, no. 9/10, p. 487-494, 527-528.

##533-537. ##552-556.

##Complete translations are available separately.

DESCRIPTORS: *Chemistry, Literature, Abstracting,
Carbon, Adsorbents, Organic solvents, Vapors,
Adsorption, *Chlorides, *Allyl radicals, Pressure,
*Explosives, *Combustion, Decontamination waves, Pro-
duction, Pyrocatechol, Synthesis, *Creosote,
*Phenols, Ethers, Decomposition, Activated carbon.

(Chemistry. VI, v. 8, no. 4)

(over)

Office of Technical Services

I. Title: Sorption...

Sulfate Nitrophosphate. I. IV. Polyphases of the Ternary
System: Ammonium Sulfate, Water, Ammonium Monophos-
phate, by P. V. Del'chev, A. G. Borzhan, 9 pp.

RUSSIAN, per, Zhur Prikl Khim, Vol XVII, 1944, pp
520-526.

OTS 66-18075
SLA R-3356

Sci

Aug 59

93, 578

The Problem of the Mechanism of Transition from
Burning to Detonation of Explosive Materials, by
K. K. Andreyev.

RUSSIAN, no per, Zhur Prikl. Khim., Vol XVII,
No 9/10, 1944, pp 533-537.

T.I.L. T.4601

Sci - Chemistry

36,926

Aug 1956

Polymerization of Chlorostyrenes, ^{ROMIL} by S. N. Ushakov,
P. A. Matusov, 15 pp UNCLASSIFIED

RUSSIAN, per, Zhur-^{PRK} Khin, Vol ^{XVII} ^{No 9/10}
~~1944~~, pp ~~444-450~~, ~~1944~~, ~~1944~~

1944 538-545

Sci Tr Center
RT-1018

Scientific - Chemistry

15,349

Conditions of Formation of Manganese Coatings
and Some of Their Properties, by K. Gorbunova.

RUSSIAN, per, Zhur Prikl Khim, Vol XVII,
1944, pp 581-587.

CSTRO

Sci - Chem
Aug 62

207,418

61-18347

Globus, R. L. and Moshchinskaya, N. K.
RESEARCH ON DIPHENYLMETHANE AND ITS DERIVATIVES. III. DESTRUCTIVE HYDROGENATION OF DIPHENYLMETHANE. [1961] (p. 11 refs.
Order from OTS or SCA \$1.10 (1-18347

I. Globus, R. L.
II. Moshchinskaya, N. K.
III. Title: Destructive...

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1944,
v. 17 (no. 11/12) p. 621-627.

DESCRIPTORS: *Diphenylmethane, Hydrogenation,
Pressure, Decomposition, *Benzene, *Toluene,
Synthesis, Catalysts, Catalysis, Methane, Phenyl
radicals

Destructive hydrogenation of diphenylmethane under atmospheric pressure and under 100 atm. hydrogen pressure was studied. It was established that diphenylmethane can completely decompose to benzene and toluene: $C_{12}H_{10} + H_2 \rightarrow C_6H_6 + C_6H_5CH_3$.
(Author) (See also 60-13878)

(Chemistry--Organic, TT, v. 6,
no. 10)

Office of Technical Services

Samarokov, V. P., Rykin, S. S., and Kurnileva, E. E.

PREPARATION OF PYROCATECHOL BY DECOMPOSITION OF PHENOL ETHERS OF WOOD CREOSOTE UNDER ATMOSPHERIC PRESSURE, II. [1961]

5p. 13 refs.

Order from XYS or SLA \$1.10

61-18215

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1944, v. 17, p. 552-556

DESCRIPTORS: *Pyrocatechol, Ethers, Wood, Creosote, Synthesis.

Experiments are reported of preparation of pyrocatechol from creosote by the action of aluminum chloride under atmospheric pressure. It was found that a practically complete decomposition of the phenol ethers is possible, using approximately equimolecular amounts of ether and aluminum chloride. This reaction is much (Chemistry: Organic, TT, v. 6, no. 7) (over)

61-18215

I. Samarokov, V. P.
II. Rykin, S. S.
III. Kurnileva, E. E.

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Office of Technical Services

Crystallization, Viscosity, Density
and Mutual Solubility of Some Solutions
of the System $\text{LiCl-H}_2\text{O-}n\text{C}_3\text{H}_7\text{OH}$, by V. T.
Slavyanskii, 8 pp.

RUSSIAN; per, Zhurnal Prikladnoi Khimii,
Vol. 17, 1944, pp 570-575.

TC-399

336,223

Sci
Aug 67

Platé, A. P. and Tarasova, G. A.
PREPARATION OF p-CYMENE FROM SULFATE
TURPENTINE. [1961] 5p. 15 refs.
Order from OTS or SLA \$1.10

61-18232

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1944,
v. 17, p. 570-579

DESCRIPTORS: *Cymenes, Catalysts, Toluenes,
*Turpentine, *Sulfate pulp, Chemical analysis.

Conversions of sulfate turpentine were investigated at
380-520° in the presence of mixed catalysts contain-
ing chromic oxide or molybdenum oxide carried on
alumina and also in the presence of a synthetic alumi-
nosilicate. In the presence of the first two of these
catalysts a yield of the cymene fraction was obtained
at 400° reaching 60% on the turpentine or 77% when
calculated on α -pinene and α -carene contained in the
(Engineering-Chemical, TT, v. 6, no. 12) (over)

61-18232

I. Platé, A. P.
II. Tarasova, G. A.

181960

Office of Technical Services

Dicaine, A Local Anesthetic, by I. Kh. Fel'dman,
E. L. Kopeliovich, 12 pp.

RUSSIAN, per, Zhurnal Prikladnoi Khimii, Vol XVII,
Nos 11, 12, ~~1944~~ 1944, pp 588-593.

Sci Trans Center RT-3406

Scientific - Chemistry, *MEDICINE*
32,718
Apr 56

Zhur Frik Khim Vol 17, 1944 pp 594-598

Bismuth Electroplating, by A. I. Lewin

AEC Trans

Bismuth Electroplating, by A. Levin, 15 pp.

RUSSIAN, per, Zhur Prikl Khim, Vol XVII, 1944, pp
613-618.

SLA R-2781

Sci

Jul 59

Va

92, 415

GORENCOV, K. S.

Zhurnal Prikladnoi Khimii, vol. 17, Nos. 9-10, 9
figures, 6 tables, 2500 words; 1944.

Chromized Layers on Iron and Steel.

Butcher Trans, Order No. 1806, \$3.75.

61-18346

Moshchinskaya, N. K.
RESEARCH ON DIPHENYLMETHANE AND ITS
DERIVATIVES. IV. DESTRUCTIVE HYDROGENA-
TION OF HIGH MOLECULAR PRODUCTS OF CON-
DENSATION OF BENZENE WITH FORMALDEHYDE.
[1961] 4p. 13 refs.

Order from UTS or SLA \$1.10

61-18346

Transl. of Zhurnal Prikladnoi Khimii (USSR) 1944,
v. 17 [no. 11/12] p. 629-633.

DESCRIPTORS: *Diphenylmethanes, Hydrogenation,
Decomposition, Pressure, *Benzene, *Toluenes,
Synthesis, Catalysis, *Formaldehyde,
Condensation reactions, Methane, Phenyl radicals

Destructive hydrogenation of mixtures of diphenyl-
methane with p- and o-dibenzylbenzenes and higher
molecular compounds under 100 atm pressure at 500°
Chemistry--Organic. TT, v. 6, no. 11) (over)

I. Moshchinskaya, N. K.

II. Title: Destructive...

Office of Technical Services

Bashkirov, A. N. and Karavaev, N. M.
A NEW METHOD OF ISOLATION OF STYRENE
FROM CRUDE BENZOL. [1961] 6p. 24 refs.
Order from OTS or SLA \$1.10 61-18188

Condensed trans. of Akademiya Nauk SSSR. Otdelente
Khimicheskikh Nauk (Izvestiya) 1963, p. 763-772.

DESCRIPTORS: *Styrenes, Separation, Chlorination,
Chlorides, Benzene.

A method of isolation of styrene is proposed, which is
said to have passed the laboratory stage of study. It
consists in treating the fraction 135-150° of crude
benzol with a 15 per cent solution of sodium hydroxide
and then with 5 per cent sulfuric acid. The product, free
of phenols and basic compounds, is then chlorinated,
and since dichlorostyrene boils at 233-234°, it can
easily be separated from the xylenes by distillation,
after which dichlorostyrene is dechlorinated at 175°
with hog iron ore, reduced at 500-550° with hydrogen
or other reducing gases. The yield of dichlorostyrene
(Chemistry - Organic, TT, v. 6, no. 6) (over)

61-18188

I. Bashkirov, A. N.
II. Karavaev, N. M.

176606

Office of Technical Services

Sumarokov, V. P. and Bogoyavlenskaya, V. N.
PREPARATION OF PYROCATÉCHOL FROM WOOD
CREOSOTE BY DECOMPOSITION OF PHENOL
ETHERS UNDER ATMOSPHERIC PRESSURE, III.
[1961] 4p. 3 refs.

Order from OTS or SLA \$1.10

61-18345

Condensed trans. of Zhurnal Prikladnoi Khimii (USSR)
1944, v. 17 [no. 11/12] p. 650-655.

DESCRIPTORS: *Pyrocatechol, Preparation, *Creosote,
*Phenols, *Ethers, Decomposition, *Hydrochloric
acids, Chemical reactions, Temperature, Velocity,
*Anilines.

The dependence of the velocity of decomposition of poly-
hydric phenols upon the temperature, the amount of
aniline used and the rate of flow of hydrogen chloride
forming the aniline salt was studied. A rise of the tem-
(Chemistry--Organic, IT, v. 6, no. 10) (over)

61-18345

I. Sumarokov, V. P.
II. Bogoyavlenskaya, V. N.

187255

Office of Technical Services

Purification of Xylose-Containing Solutions with Calcium Oxides, by N. A. Sychev and M. I. Shmatova, 4 pp.

RUSSIAN, per, Zhur Prikl Khim, Vol XXII, 1944, pp 381-393.

655-658.

SLA R-216 72

Sci

Aug 58

72,153

Catalytic Oxidation of Phenanthrene. I. Effect of Various Factors on the Catalytic Oxidation of Phenanthrene, by H. N. Vorozhtsev, D. A. Gurevich, 7 pp.

RUSSIAN, no per, Zhur Prik Khim, Vol XVIII, No 1/2, 1945, pp 3-9.

SLA 62-10018
Sci Tr Ctr RT-3438

Scientific - Chemistry

34, 918

May 56 CTB/dex

Vorozhtsev, N. N. and Gurevich, D. A.
CATALYTIC OXIDATION OF PHENANTHRENE
II. MECHANISM OF ACTION OF VANADIUM PENT-
OXIDE [Zuchenie Kataliticheskogo Okisleniya Fenan-
treina, II]. [1961] 4p. 2 refs.
Order from OTS or SLA 511 10

61-18223

Condensed trans. of Zhurnal Prikladnoi Khimii (USSR)
1945, v. 18 [no. 1/2] p. 10-14.

DESCRIPTORS: Oxidation *Phenanthrenes, Catalysts,
*Vanadium compounds, Oxides, Vapor phase, Crystals,
Naphthalenes.

Observations of the process of oxidation of hydrocarbons
over vanadium pentoxide were correlated with a study
of microphotographs of the surface of samples of the
catalyst. It was established that vanadium pentoxide
interacts with the charge and this results in essential
changes of its surface involving reduction to the tri-

(Chemistry--Physical, TT, v. 6, no. 8) (over)

61-18223

- I. Vorozhtsev, N. N.
- II. Gurevich, D. A.
- III. Title: Mechanism...

195139

Office of Technical Services

Lozovoi, A. V. and Senyavin, S. A.
VELOCITIES OF DECOMPOSITION OF HYDROCAR-
BONS IN DESTRUCTIVE HYDROGENATION. II.
ANTHRACENE, 9,10-DIHYDROANTHRACENE, SYM-
METRICAL OCTAHYDROANTHRACENE, PERHYDRO-
ANTHRACENE, PHENANTHRENE AND 1,2-BENZAN-
THRACENE. [1961] 7p. 30 refs.
Order from OTS or SLA \$1.10

61-18224

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1945,
v. 18 [no. 172] p. 35-42

DESCRIPTORS: *Hydrocarbons, Decomposition,
*Hydrogenation, *Anthracenes, Catalysts,
*Phenanthrenes

Hydrogenation of 6 fused ring polynuclear aromatic and
hydroaromatic hydrocarbons was studied under an
initial hydrogen pressure of 80 atm. at 380, 420 and
475° in the presence of 5% molybdenum sulfide, and the
(Chemistry--Organic, IT v. 6, no. 8) (over)

61-18224

I. Lozovoi, A. V.
II. Senyavin, S. A.
III. Title: Anthracene...

10140

Office of Technical Services

Mamedli, M. G.

CATALYTIC DESULFURIZATION OF GASOLINE, 1.

[1961] 5p. 22 refs.

Order from OTS or SLA \$1.10

61-18242

61-18242

1. Title: Desulfurization

1. Mamedli, M. G.

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1945, v. 18
[no. 1/2] p. 52-68.

DESCRIPTORS: Catalysts, *Gasoline, Sulfur compounds,
Fuels, Clays, Hydrocarbons, Decomposition, Separation.

165143

A study of the suitability of 12 samples of clays from four regions on the Apsheron peninsula in USSR for catalytic desulfurization of gasoline showed that some natural clays can be used without activation for this process, effecting removal of up to 88% of the sulfur from samples with an initial sulfur content of 0.059% at 400°C. However, at this temperature partial cracking may occur and the optimal conditions are thought (Materials--Fuels, TT, v. 6, no. 8) (over)

Office of Technical Services

On Effectiveness of Oxygenated Air Application in
the Contact Nitric Acid Manufacture, by V. I.
Atrushchenko, 9 pp.

RUSSIAN, per, Zhur Prik K. im, Vol XVIII, Nos 1, 2,
1945, pp 81-85.

26/7/5

Sci Trans Center
RT 2358

Scientific - Chemistry

Sep 55 CTS/DEX

61-18348

I. Grinevich, V. M.

Grinevich, V. M.
A STUDY OF ZINC-CHROMIUM CATALYSTS FOR
SYNTHESIS OF METHANOL. [1961] 5p. 3 refs.
Order from OTS or SLA \$1.10 61-18348

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1945, v. 18,
p. 90-96.

DESCRIPTORS *Methanols, Synthesis, *Zinc compounds
*Chromium compounds, *Oxides, Catalysts, Catalysis.

The efficiency of the catalyst for synthesis of methanol
of the composition $8ZnO \cdot Cr_2O_3$ is raised by
about 40% by substituting chromium oxide by chromium
trioxide, without affecting the composition of the pro-
duct. The catalysts $8ZnO \cdot 3CrO_3$ and $2ZnO \cdot CrO_3$ are
identical in activity. An increase of their content of
chromium to a composition of $ZnO \cdot CrO_3$ reduces the
efficiency of the catalyst by 60% when the latter is pre-
(Chemistry--Organic. IT, v. 6, no. 10) (over)

Office of Technical Services

62-14160

JOURNAL OF APPLIED CHEMISTRY, 1945, VOL. 18,
NO. 3: [TABLE OF CONTENTS AND SELECTED
ABSTRACTS, [1961] 3p, 7 refs.
Order from CTS or SLA \$1.10

62-14160

Abstract trans. of Zhurnal Prikladnoi Khimii (USSR)
1945, v. 18, no. 3, p. 101-111, 121-125, 175-176,
184-190.

DESCRIPTORS: Chemistry, Abstracting, Periodicals,
Indexes, Acetones, Chlorides, Synthesis, Plants,
Oils, Coal, Coal tar, Chemical analysis

Contents:

Applied chemistry in the Academy of Sciences, by
O. E. Zvyaginsev and A. E. Porai-Koshits
Continuous method of preparation of chloracetone, by
E. A. Shilov and G. V. Kupinskaya
Chemical composition of oil from Lappula echinata
(Chemistry, TT, v. 7, no. 12)

(over)

Office of Technical Services

Ivanov, K. I., Blagova, T. A. and others.
PREPARATION OF LUBRICATING OILS BY ALKYLATION OF COAL TAR HYDROCARBONS. [1961] 14p.
18 refs.

Order from OTS or SLA \$1.10

61-18239

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1945,
v. 18, p. 158-171.

DESCRIPTORS: *Coal tar, Hydrocarbons, Lubrication,
*Oils, Synthesis, Alkyl radicals.

Alkylation of aromatic hydrocarbons of coal tar from coking with olefins of the coke oven gas in the presence of aluminum chloride and hydrogen chloride may form up to 38% lubricating oils calculated on the hydrocarbon charge. The quality of the oil is close to petroleum oil. It requires no treatment with chemicals or dewaxing. Considerable quantities (up to 40%) of gasoline consisting of saturated hydrocarbons are also obtained which (Materials--Lubricants, TT, v. 6, no. 6) (over)

61-18239

I. Ivanov, K. I.
II. Blagova, T. A.

176618

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Cobalt Silicates, by N. P. Diew, V. V. Gribovsky, 4 pp.
UNCLASSIFIED

Full translation.

RUSSIAN, per, Zhur Prikl Khim, Vol. XVIII, 1945,
pp 181-183.

AEC Tr 2014

Scientific - Chemistry

May 53 CTS

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INVESTIGATION ~~8~~ IN THE FIELD OF VOLATILE
SOLVENTS RECOVERY ON SOLID SORBENTS. 9.
INVESTIGATION OF THE DESORPTION OF
VOLATILE SOLVENTS FROM CARBON LAYERS, BY
E. V. ALEKSEYEVSKIY, Z. S. VANYUSHINA,

RUSSIAN, PER, ZHUR PRIK KHM, VOL X XVIII, 1945
PP 193-206.

NLL M.3480

SCI - CHEM

JUN 62

199,105

Thur Prik Khin XVIII, 221-9, (1945)

Adsorption Properties of Kaolin

Ya. A. Fielkov (Inst of Chem os USSR Acad Sci)

(Wilson Dam 2441)

SLA R-7634

3h. Pink. R1: XVIII (4-5) 251-258 (1945)
Meyerson, Lipke

Investigation of Conditions of Titanium
Carbonization

(NACA Tech memo (1235) 13pp July 49

Quantitative Separation of Columbium and Titanium With
Sodium Hypophosphite, by I. P. Alimarin, T. A. Burova.

RUSSIAN, Dokl. Zhur Prikl Khim, Vol XVIII, No 6,
1945, pp 289-293.

Butcher Tr No 2584

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Scientific - Chemistry

\$4.85

Zhur Prikl Khim, XVIII, 294-300 (1945)

Electrolysis of Nickel Mat

M. Loshkarev, O. Esin, and G. Lapp (Electrochem Lab of
the Kirov Ural Industrial Inst)

(Wilson Dam 2442)

Khain, S. S., Prost, A. V. and others.
DEHYDRATION OF ISOPROPYL ALCOHOL OVER
SOLID CATALYSTS [1961] 8p. 13 refs.
Order from OTS or SLA \$1.10 61-18344

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1945,
v. 18, p. 301-308.

DESCRIPTORS: *Propanols, Dehydration, *Propyl
ethers, Synthesis, *Aluminum compounds, *Alums,
Catalysis, Chemical reaction, Temperature, Pres-
sure, Velocity

A catalyst was developed with which 25.9-29.4 mol-%
yields of isopropyl ether can be obtained from iso-
propyl alcohol of 92-95% concentration, when calcu-
lated on the alcohol charged or 66.5-73.8% on the
alcohol converted, for a rate of flow of 1.16-5.70
l/kg catalyst per hour and a reaction temperature of
(Chemistry-Physical, TT, v. 6, no. 10) (over)

61-18344

I. Khain, S. S.
II. Prost, A. V.

Office of Technical Services

62-14162

JOURNAL OF APPLIED CHEMISTRY, 1945, VOL. 18,
NO. 6: [TABLE OF CONTENTS AND SELECTED AB-
STRACTS]. [1961] 3p.

Order from OTS or SLA \$1.10

62-14162

Abstract trans. of Zhurnal Prikladnoi Khimii (USSR)
1945, v. 18, no. 6, p. #313 and 372-373.

#A complete trans. of p. 313-321 is available from
SLA as RT-3403.

DESCRIPTORS: *Chemistry, Literature, Abstracting,
Ammonia, Catalysis, Bactericides, Determination.

Contents:

#Selection of new materials for ammonium catalysts,
by V. M. Grinevich

Determination of small amounts of antiseptics of the
type of zefirol, by G. A. Garkusha and T. N. Pater.
(Chemistry, IT, v. 8, no. 4)

1. Title: Zefirol

Office of Technical Services

Selection of New Kinds of Raw Material for
Ammonia Catalysts, by V. M. Grinevich, 14 pp.

RUSSIAN, per, Zhurnal Prikladnoi Khimii, Vol
XVIII, No 6, 1945, pp 313-321.

Sci Trans. Center RT-3405

Scientific - Chemistry

32,711

Apr 56

61-18341

Firsanova, E. N.
INVESTIGATION OF THE CHEMICAL COMPOSITION
OF SYNTHETIC. II. ANALYSIS OF WATER FORMED IN
SYNTHESIS OF HYDROCARBONS. [1961] 6p. 5 refs.
Order from OTS or SLA \$1.10 61-18341

I. Firsanova, E. N.
II. Title: Analysis ...

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1945, v. 18,
p. 367-371.

DESCRIPTORS: *Hydrocarbons, Synthesis, Nickel,
Cobalt, Aluminum, Catalysts, Chemical reactions,
*Alcohols, *Acids, *Water, Chemical analysis.

.253

The products of interaction of carbon monoxide with
hydrogen under atmospheric pressure in the presence
of a nickel-cobalt-aluminum catalyst at 180-190°C con-
tain not only hydrocarbons and small amounts of acids,
but also aliphatic alcohols and aldehydes soluble in
water. From the reaction water 0.15-0.37% neutral
(Chemistry--Organic, TT, v. 6, no. 10) (over)

Office of Technical Services